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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/502,791	02/11/2000	Yoshinobu Nakamura	1046.1210/JDH	5681

21171   7590   02/25/2004

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EXAMINER
SHRADER, LAWRENCE J

ART UNIT	PAPER NUMBER
2124	

DATE MAILED: 02/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/502,791	NAKAMURA, YOSHINOBU
	Examiner	**Art Unit**
	Lawrence Shrader	2124

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12/08/2003*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10;14, and 15* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10;14, and 15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *11-13 and 16* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

        1.☒ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   This action is in response to the amendment filed December 8, 2003.

2.   Claims 1 – 10, and 14 – 15 remain rejected under *35 USC § 103* and repeated below; and

claims 11 – 13, and 16 remain subject to restriction.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

4.   Claim 1 – 7; 8 –10; 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Nakamura, Japanese Patent No. JP405100864A in view of Gan et al., U.S. Patent 5,878,238

(hereinafter referred to as Gan).

In regard to claim 1:

"A program processing unit judging decoding the program, and judging whether or not

an address described in the decoded program is effective...;" Nakamura discloses a method

whereby a judgment (or a decision) is made concerning the conversion of a label address during

the processing of a program (Abstract).

"A label address translating unit performing an exception handling for re-writing an

address ..." Nakamura discloses a method whereby a judgment (or a decision) is made

concerning the conversion of a label address during the processing of a program (Abstract). If a label is encountered during the code assembly the program, a table look-up is implemented to obtain and write a physical address. The use of an exception is not explicitly specified in Nakamura. However, Gan teaches the use of an exception handler to look up an address in a table. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify the Nakamura invention (judging the content of an address label, implementing an address table look-up, and writing the address) with an exception handler as taught by Gan to lookup and write the address when judged necessary by the Nakamura invention. This modification would be obvious because one of ordinary skill would recognize the exception can be thrown when it is judged that the address is not obtained from the label and the lookup/writing process is then handled by the dedicated exception function in order improve processor performance by efficiently providing the effective address.

In regard to claim 2, incorporating the rejection of claim 1:

"...said label address translating unit uses a table showing a relationship between the label and effective address." Nakamura discloses a table, which provides the relationship between the label and the effective address (Abstract).

In regard to claim 3, incorporating the rejection of claim 1:

"...said program processing unit...judges that the address is not effective." Nakamura teaches that a decision unit determines (judges) that a label must be converted to a physical address (Abstract).

In regard to claims 4 – 6 (the method), rejected for the same reasons put forth in the rejection of claims 1 – 3 (the device).

In regard to claim 7 (storage medium), rejected for the same reasons put forth in the rejection of claim 1 (the device) above.

In regard to claim 8:

Rejected for the same reasons put forth in the rejection of claim 1. The same exception process could be implemented whether the target program is interpreted or compiled.

In regard to claim 9 (a method), rejected for the same reasons put forth in the rejection of claim 8 (a device).

In regard to claim 10 (computer medium), rejected for the same reasons put forth in the rejection of claim 8 (a device).

In regard to claim 14:

Rejected for the same reasons put forth in the rejection of claim 1. The same judging and exception handling for writing an address could be implemented while the target program is executed and the addresses dynamically assigned.

In regard to claim 15:

Rejected for the same reasons put forth in the rejection of claim 1. The same judging and exception handling for writing an address could be implemented if the target program is processed either by an interpreter or by a compiler rather than a dynamic configuration as in claim 14.

Response to Amendment

5.   Applicant's arguments filed on December 8, 2003 have been fully considered but they are

not persuasive:

Applicant has argued:

As acknowledged by the Examiner, Nakamura does not teach exception handling.
Nevertheless, Gan et al. is cited for teaching same. However, Gan et al. relates to when an
incompatible or "semi-compliant" video card is used with a PC, i.e., is put in the wrong slot.
Instead of the video card being totally unusable, the PC detects the incompatible video card
(see, e.g., Col. 2, lines 66-67 and Col. 4, lines 1-16), and any attempted write cycle to an
address in the VGA address space results in the execution of an "exception handler".
        More particularly, the option ROM of the video card is activated and the I/O address
space thereof is read. An address look up table is also generated. A determination is then made
as to whether the address of the write cycle is part of the address space of the card as specified
in the look up table. If not, the bridge is remapped to handle the address. The cycle is
forwarded to the video card, the card is initialized and the bridge is remapped to its original
mapping. A return from this exception handling is then executed. In this way, the video card
may be initialized and used to instruct the user, via a displayed message, only that the video
card should be moved to another slot, before the PC can be used further. See Col. 4, lines 14 –
51.
        Thus at most, when an incorrectly installed video card is detected, Gan et al. teaches
going to a pre-set group of addresses, and an appropriate address is selected and executed to
allow the video card to operate to a limited extent to advise the user that the card must be
moved to a more appropriate slot in order to properly function.
        Gan et al. does not, like Nakamura does not, teach the above-described recited
judgment of whether the address is effective and, if ineffective, re-writing the label as an
effective address directly into the program.

Examiner's response:

The Office Action shows that Nakamura teaches the converting or decoding of a program

and rewriting an address described in the decoded program into an effective address. The

exception handling part of the applicant's claim is not a unique feature as shown by the Gan

reference. Exceptions can be used for many functions. The rewriting of the address could be

done several ways, including an interrupt or exception.

Conclusion

6.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

7.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Lawrence Shrader whose telephone number is (703) 305-8046.

The examiner can normally be reached on M-F 08:00-16:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kakali Chaki can be reached on (703) 305-9662. The fax phone numbers for the
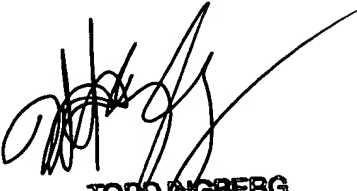
organization where this application or proceeding is assigned are (703) 746-7239 for regular

communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 305-3900.

Lawrence Shrader
Examiner
Art Unit 2124

February 17, 2004

TODD INGBERG
PRIMARY EXAMINER